

Targeted Detection Surveys (Hot Zones)

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(Hot Zone) (Risk Management) (Database Support)



Targeted Detection Surveys (Hot Zones)

Concept Goals... (reminder)

- Become Proactive not Reactive
- Reveals potential risk areas or zones of risk (start somewhere)
- Conserve resources (efficiency)
- Visualize the data (Mapping)
- Establish area or zones that need future monitoring..

Targeted Detection Surveys (Hot Zones)

- The Road to the “Zone”
 1. Pick one Topic initially and expand over time... One pest and a few commodities. Or, one commodity and a few pests.
 2. Define your area: (State) or (Area of a State) or (even County and City)
 - Make it a manageable area, if it gets to large, scale back and regroup, targeting a smaller area.
 3. Identify some data sources.
 - Use the most accessible data first and work up to the Hard stuff.
 - Open source (the internet, phone books etc.)
 - EAN database.
 - SITC market information
 4. Remember to think about commodity pathways



Create an initial picture and ground truth it.

Layer the data initially available.

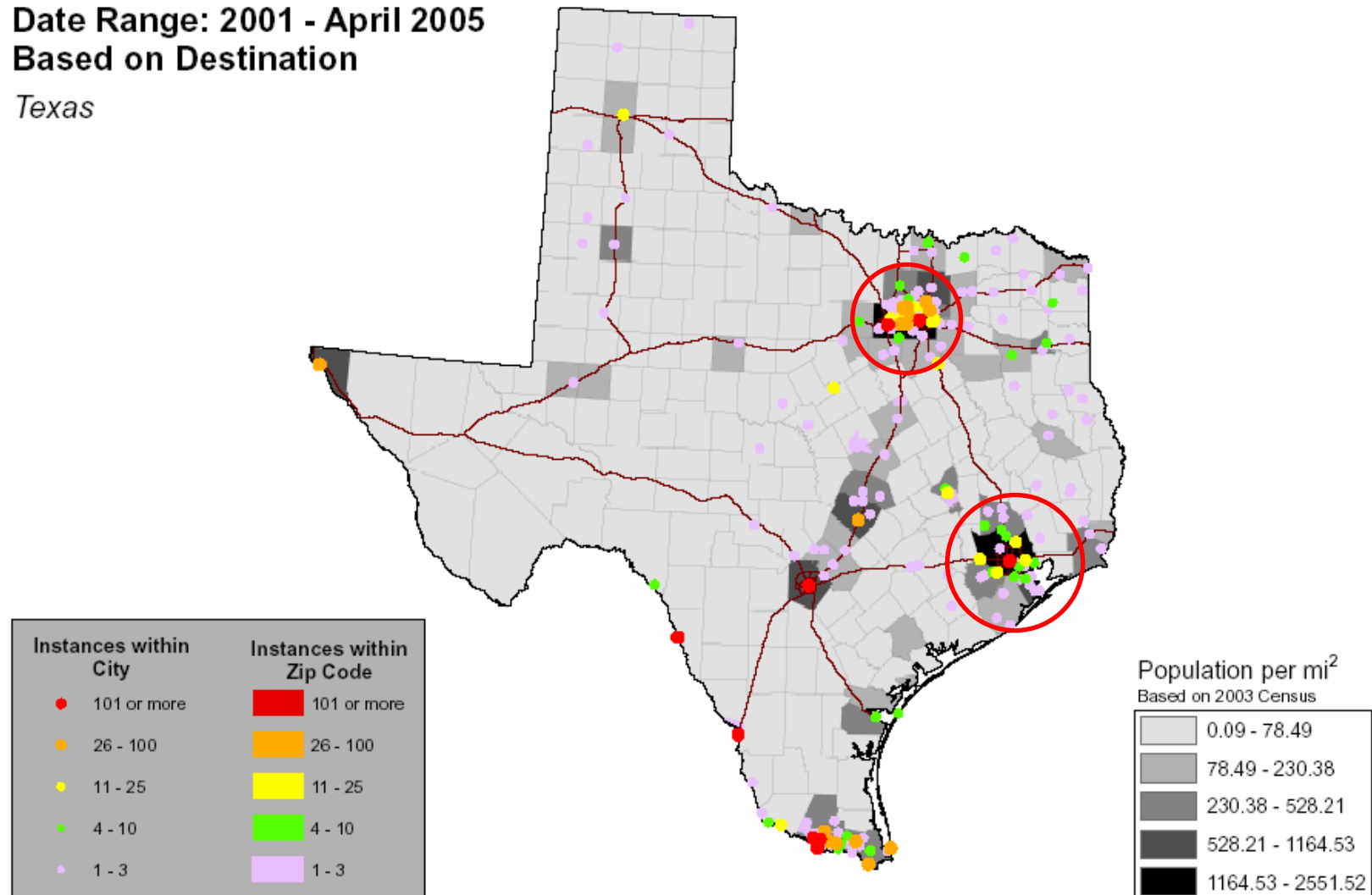
- Example: start with population densities
an add **“Risk Points”** in layers.
- Other Layers: Host, previous pests, EAN
to destination, products pathways,
violations, related industries, etc...

EANS Issued

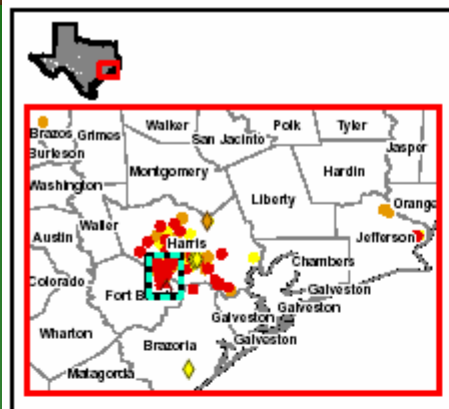
Date Range: 2001 - April 2005

Based on Destination

Texas

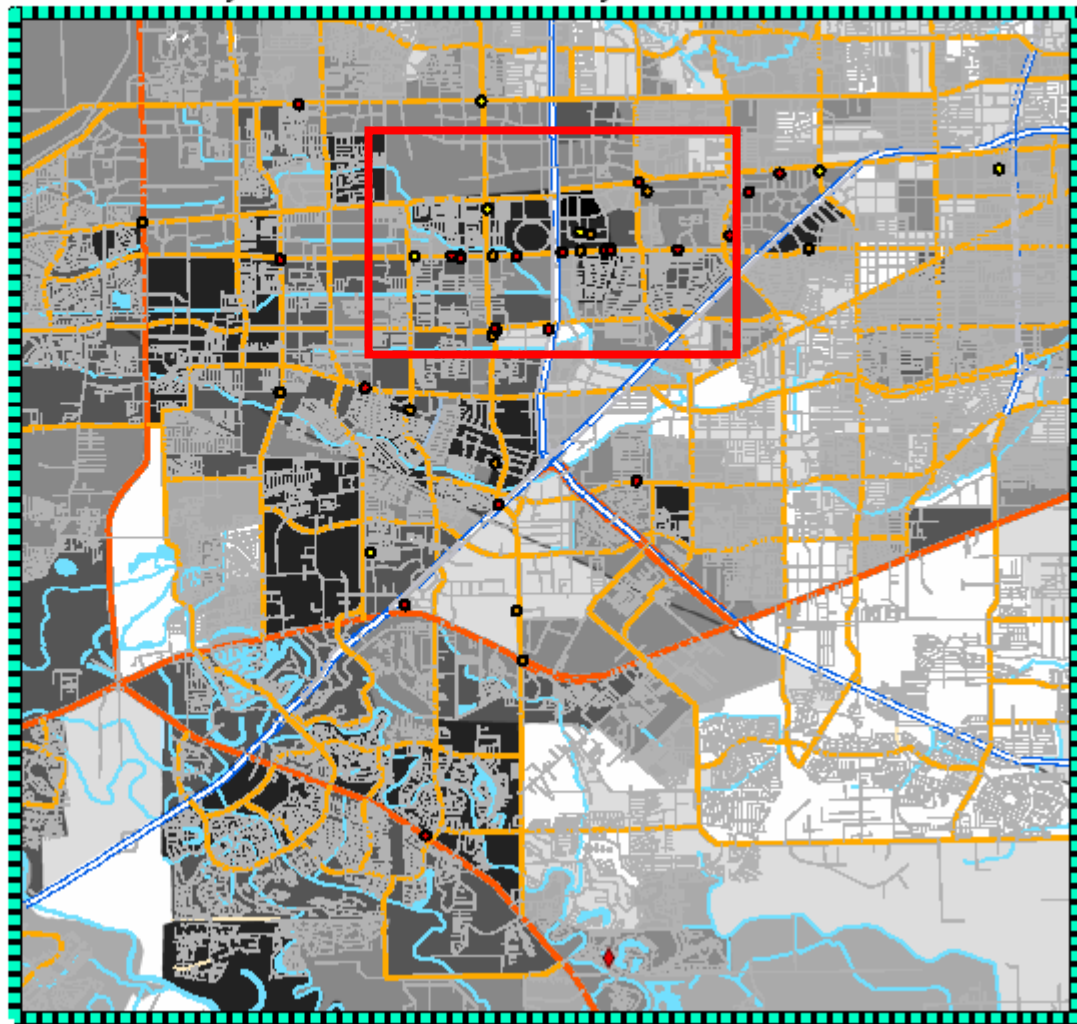


Plant Protection and Quarantine



Asian Markets Surveyed in the Houston Area

*Border:
Harris County and Fort Bend County*



Risk Level

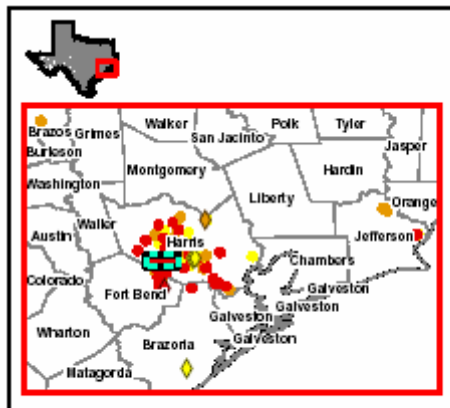
- High
- Medium
- Low

- Indicates Accuracy at Zip Code Level
- Indicates Accuracy at Address Level

Percent of Population - Asian

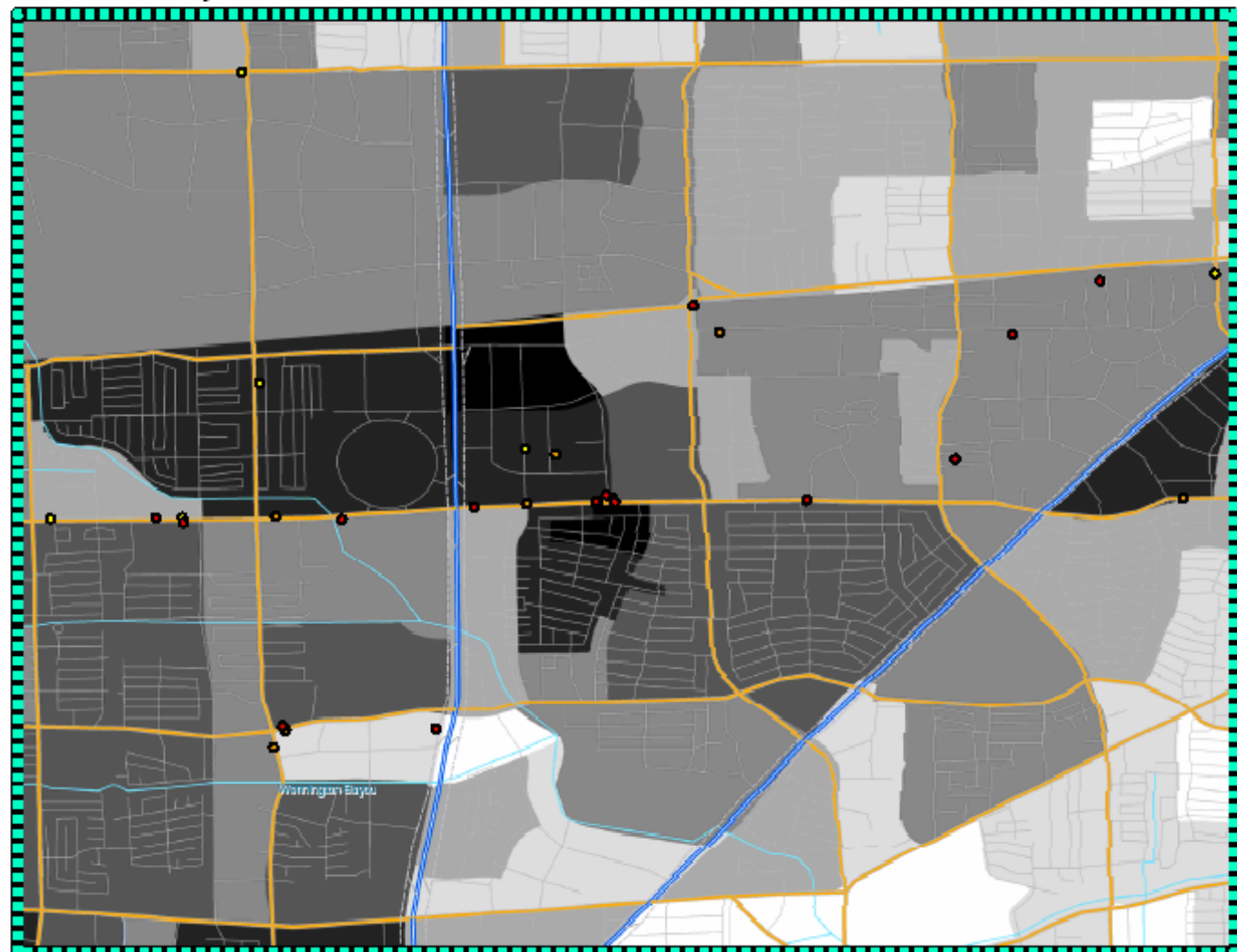
Based on 2003 Census
at the Census Block Level

- 0.000 - 0.017
- 0.018 - 0.046
- 0.047 - 0.088
- 0.089 - 0.154
- 0.155 - 0.252
- 0.253 - 0.407
- 0.408 - 0.673



Harris County

Asian Markets Surveyed in the Houston Area



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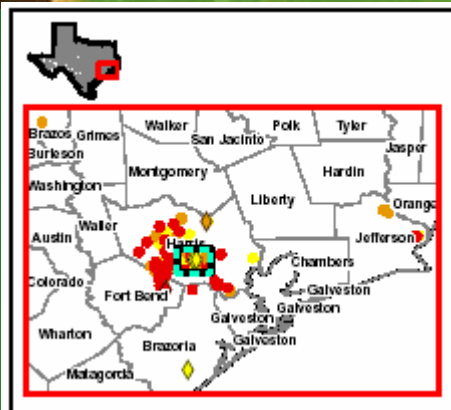
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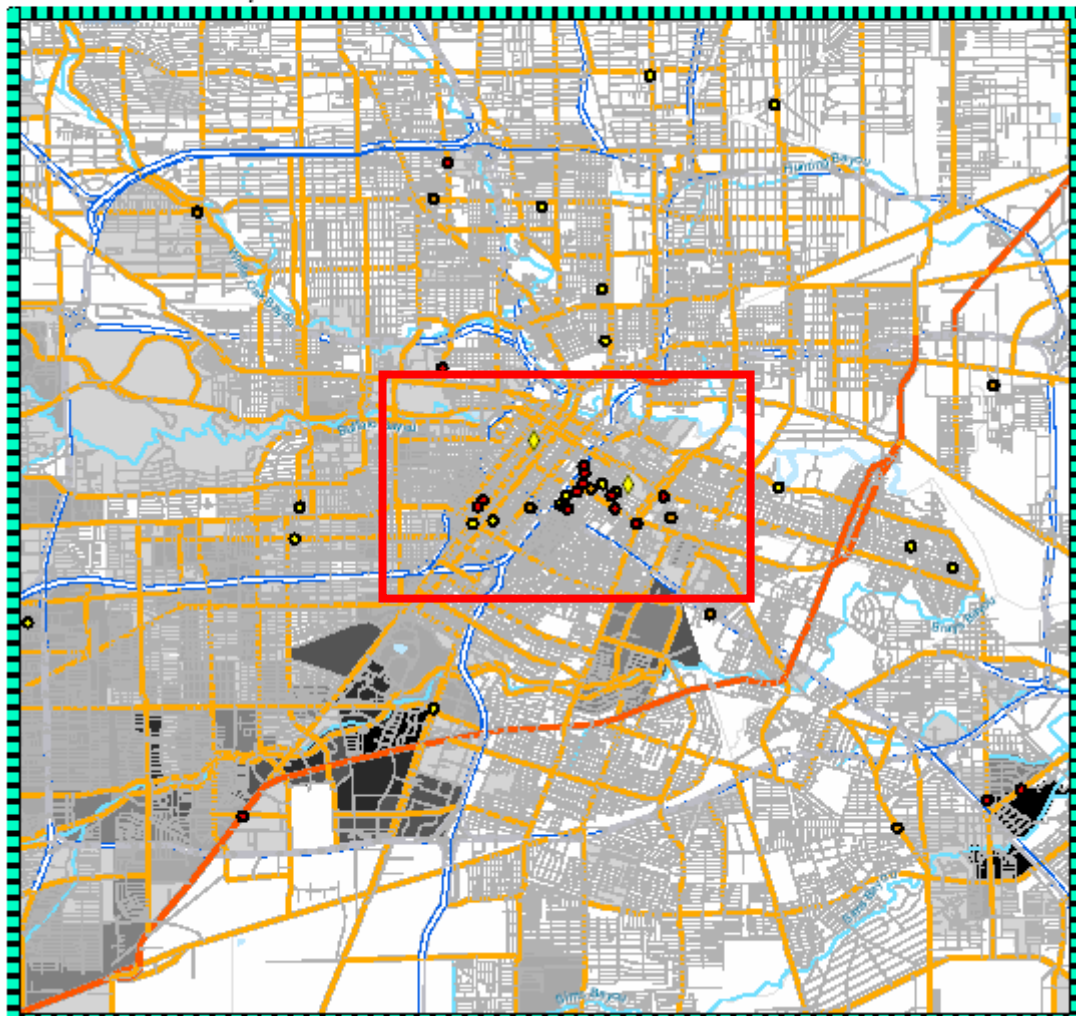
After Initial “rough draft maps” are created..

- Define/identify potential “Hot Zones”
- Remember: One or many risk points can make up a Hot zone. (may depend on activity within your area or state.)
- Ground truth the information with “site visit” surveys.



*Harris County
Inside the Loop*

Asian Markets Surveyed in the Houston Area



Risk Level

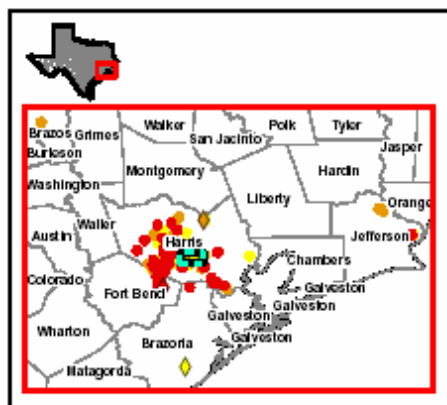
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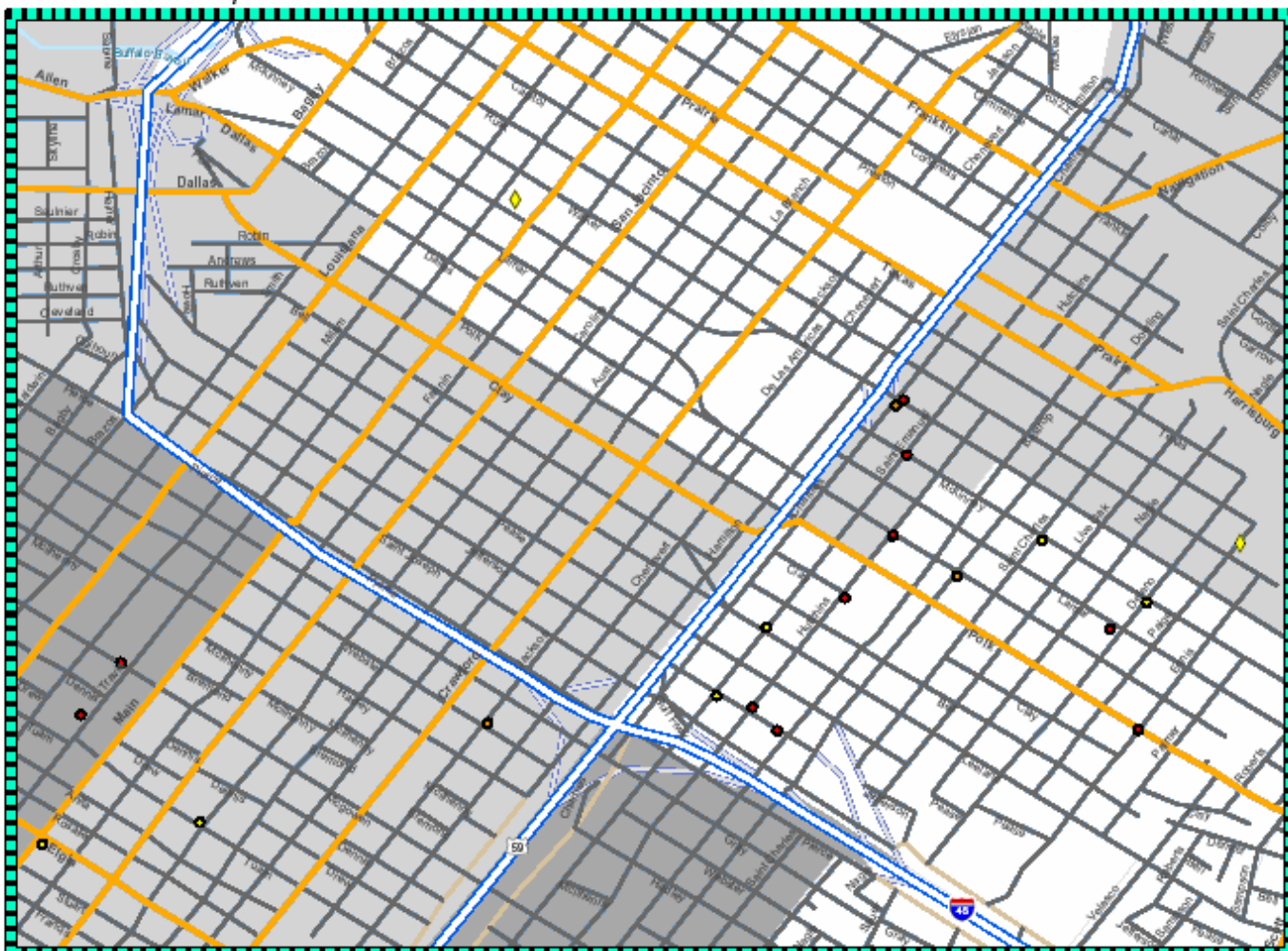
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|---|---------------|
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*Harris County
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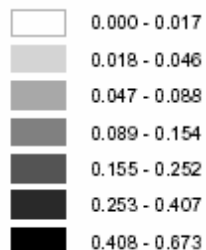
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- Debrief after the survey.. SOSOs, SPHDs,
- Decide if your ground truthing surveys point towards establishing a “Hot zone” – (An area that may require reoccurring monitoring surveys...)



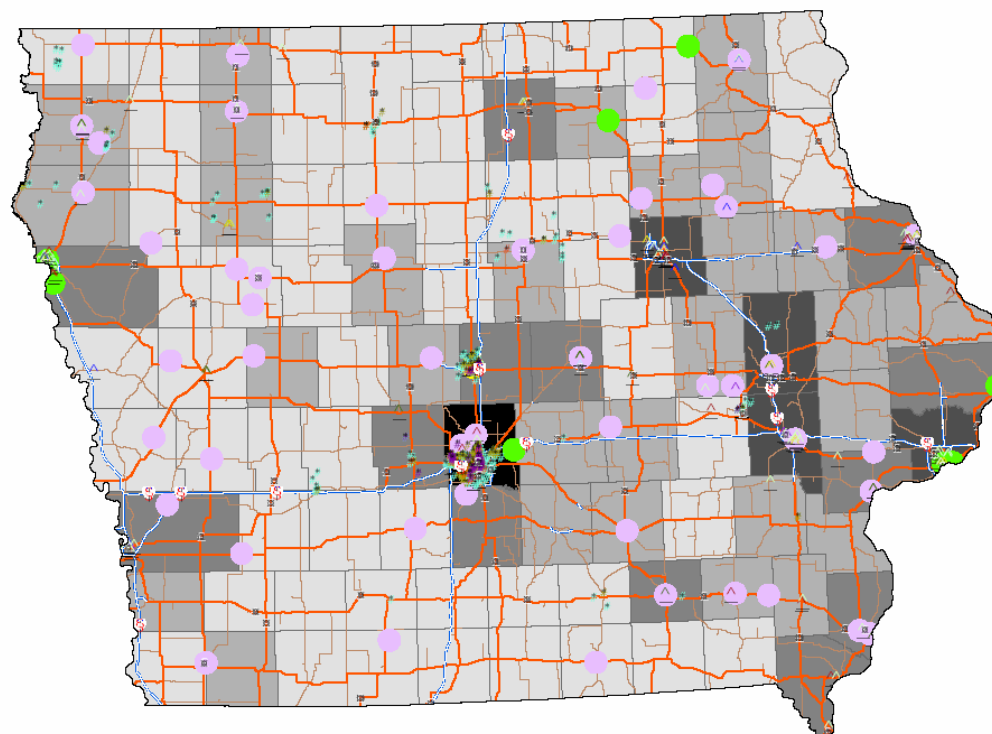
Remember not everything can be a Hot Zone.. If you designate an area as a Hot Zone be prepared to spend time monitoring it.



United States
Animal and Plant
Health Inspection Service
Plant Protection

Iowa

SITC Markets and Importers and EANs Issued with relation to Population Density



EAN Instances within a City

Date Range: 2001 - April 2005
Based on Destination

- 101 or more
- 26 - 100
- 11 - 25
- 4 - 10
- 1 - 3

SITC Markets Surveyed

Date Range: 2001 - March 24, 2005
Based on Market Type

- ▲ Asian
- ▲ Craft
- ▲ Department
- ▲ European
- ▲ Grocery
- ▲ Hispanic
- ▲ Middle East
- ▲ Nursery
- ▲ Other
- ▲ Pet

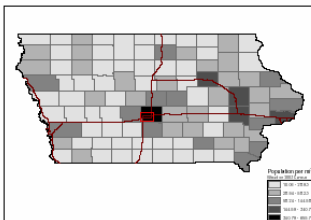
SITC Importers

Date Range: 1994 - 2004
Based on Number of Shipments

- 1 - 9
- 10 - 199
- 200 - 499
- 500 and Above

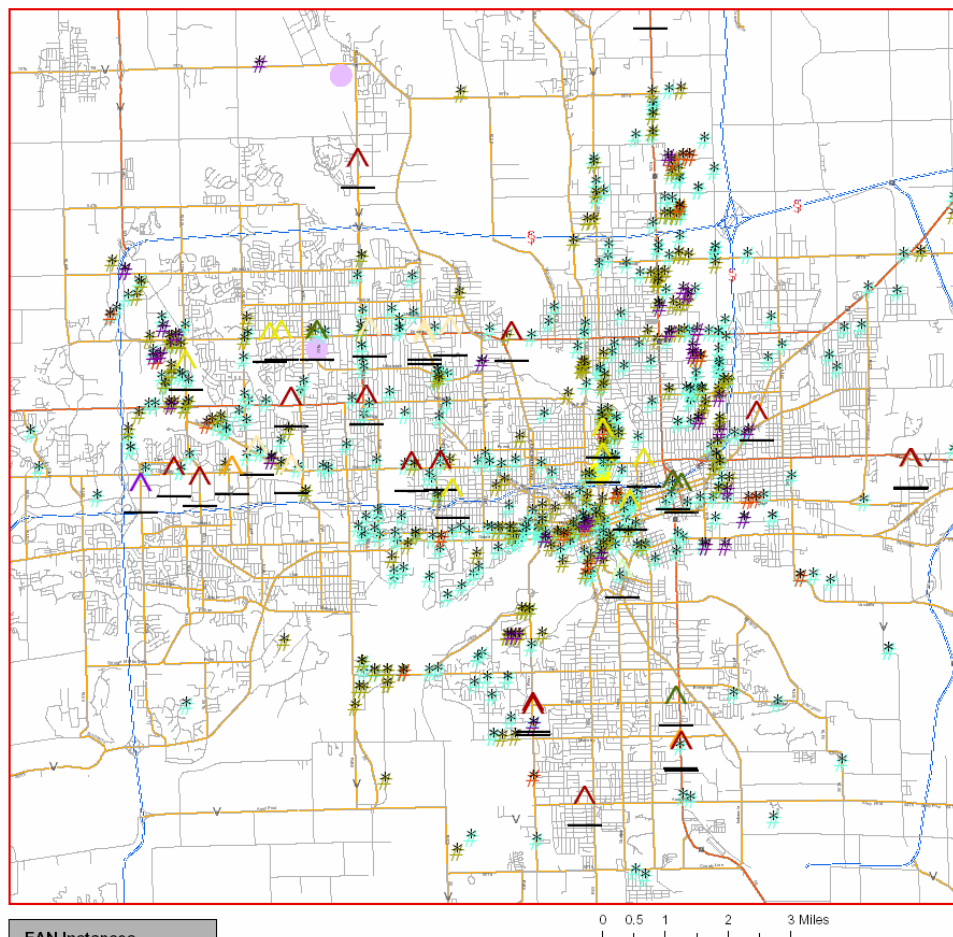
Population per mi² Based on 2003 Census

- 10.06 - 28.93
- 28.94 - 58.23
- 58.24 - 144.58
- 144.59 - 340.78
- 340.79 - 655.73



Iowa

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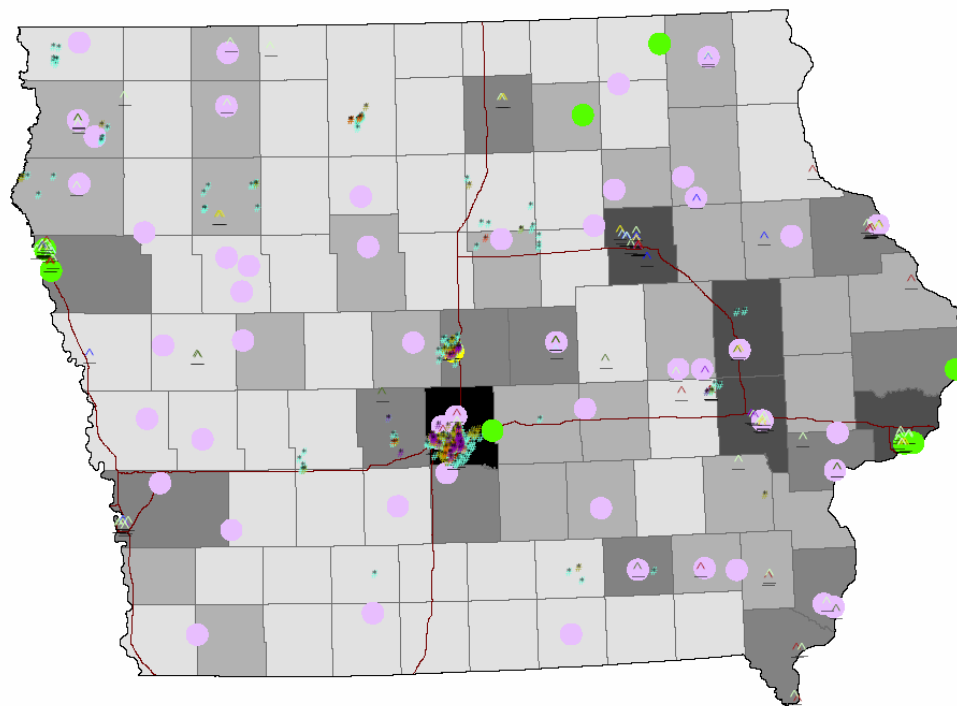
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Acknowledgements

Maps

Laura O'Gan (GIS)

Brain Marschman (SITC)

Hot Zone Concept Ideas

Stuart Kuehn (RPM)

Brian Marschman (SITC)

Phil Mason (PSS)

Jason Watkins (PSS)

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